



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/117,246	12/03/1998	DOLORES LUDEVID	50062/004001	3466

7590

09/22/2003

KRISTINA BIEKER BRADY
CLARK & ELBING
176 FEDERAL STREET
BOSTON, MA 02110

EXAMINER

KALLIS, RUSSELL

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 09/22/2003

26

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/117,246

Applicant(s)

LUDEVID ET AL.

Examiner

Russell Kallis

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,23-27 and 42-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-3,23-27 and 42-82 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Upon further consideration and in view of Applicant's filing of new Claims 42-82 on June 4th, 2001 the claims have been re-restricted.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-3, 23, 42-50, 52-55, 57-64, 69-75, 77-82, drawn to oligonucleotides designed to enrich for lysine in a gamma-zein protein from maize by having repeating (P-K)_n concatenation, and maize host cells and maize plants transformed with said recombinant nucleotide.

Group II, claim(s) 1-3, 23, 42-50, 56, 58-59, 61, 63, 69-72, 76, 77-78, 80-81, drawn to oligonucleotides designed to enrich for lysine in a reserve protein from a non-maize cereal plant, normally low in lysine, by having repeating (P-K)_n concatenation, and non-maize cereal host cells and non-maize cereal plants transformed with said recombinant nucleotide.

Group III, claim(s) 1-3, 23, 42-49, 51, 56, 58-59, 61, 63, 69-72, 76, 77-78, 80-81, drawn to oligonucleotides designed to enrich for lysine in a reserve protein from a leguminous or cruciferous plant, normally low in lysine, by having repeating (P-K)_n concatenation, and crucifer and legume host cells and crucifer and legume plants transformed with said recombinant nucleotide.

Group IV, claim(s) 1-3, 23, 42-49, 56, 58-59, 61, 63, 69-72, 76, 77-78, 80-81, drawn to oligonucleotides designed to enrich for lysine in a reserve protein from non-cereal, non-maize, non-leguminous, or non-cruciferous plant, normally low in lysine, by having repeating (P-K)_n concatenation, and non-cereal, non-maize, non-leguminous, or non-cruciferous host cells and non-cereal, non-maize, non-leguminous, or non-cruciferous plants transformed with said recombinant nucleotide.

Group V, claim(s) 24-27, 65-68, drawn to a lysine enriched polypeptide.

Art Unit: 1638

The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Claim 1 is drawn to an oligonucleotide comprising at least one concatenation coding for a polypeptide with the formula $(P-K)_n$. Forney J. et al. GenBank Accession Number M19784 teach an oligonucleotide and the complement thereof, and thus the double stranded oligonucleotide encodes a repeating $(P-K)_n$ concatenation. Claim 1 is not free of the prior art and, therefore, a special technical feature does not link the claims of the instant application.

Further, the invention of Groups I-IV are different than the invention of Group V because Groups I-IV, drawn to oligonucleotides designed to enrich for lysine in plants transformed therewith have a different chemical composition than the polypeptide of Group V. Groups I-IV differ from each other because they are drawn to different recombinant polynucleotides encoding different storage proteins and different transformed plants comprising said recombinant polynucleotides. For Example, Group I is drawn to a lysine enriched recombinant polynucleotide encoding a maize zein storage protein and a transformed maize plant, while Group II is drawn to a lysine enriched recombinant polynucleotide encoding a non-maize cereal storage protein and non-maize cereal plants, and Group III is drawn to a lysine enriched recombinant polynucleotide encoding a leguminous or cruciferous storage protein and transformed leguminous or cruciferous plants, and Group IV is drawn to a lysine enriched recombinant polynucleotide encoding a non maize, non-cereal, non-leguminous and non-cruciferous storage protein and transformed non maize, non-cereal, non-leguminous and non-cruciferous plants.

Art Unit: 1638

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Claims 1-3, 42-49, 58-59, 61, 63, 69-72, 77-78 and 80-81 link(s) inventions I-III and IV. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claim(s), claims 1-3, 42-49, 58-59, 61, 63, 69-72, 77-78 and 80-81. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Applicant is reminded that upon cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).


Art Unit: 1638

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kallis whose telephone number is (703) 305-5417. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (703) 306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0198.

Russell Kallis Ph.D.
September 9, 2003



ASHWIN D. MEHTA, PH.D
PATENT EXAMINER